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J1046 U.S. PTO
09/993647
11/27/01

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: :
Bernd RIEDL et al. : Group Art Unit: TO BE ASSIGNED
Serial No.: TO BE ASSIGNED : Examiner: TO BE ASSIGNED
Filed: November 27, 2001 :
For: ω -CARBOXYARYL SUBSTITUTED DIPHENYL UREAS AS RAF
KINASE INHIBITORS

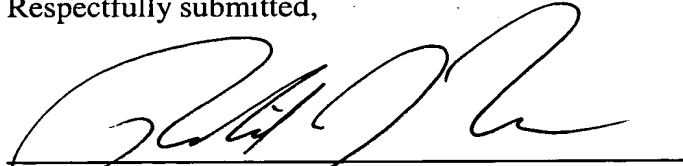
INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

Copies of the references listed on the attached 1449 forms can be found in the file for application Serial No. 09/722,418, filed November 28, 2000, which was converted to a provisional application on November 27, 2001. Copies of these documents will be hand carried to the Examiner if necessary for consideration of these references. The Examiner is encouraged to contact the undersigned if any copies are needed.

Respectfully submitted,



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BAYER 18A

Form PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)	ATTY. DKT. NO. BAYER 18A	SERIAL NO. TO BE ASSIGNED
	APPLICANT Bernd RIEDL	
	FILING DATE November 27, 2001	GROUP TO BE ASSIGNED

U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date
AA	3,823,161	07/09/74	Lesser			
AB	5,130,331	07/14/92	Pascual			
AC	4,808,588	02/28/89	King			
AD	3,424,760	01/28/69	Helsley et al.			
AE	3,424,761	01/28/69	Helsley et al.			
AF	3,424,762	01/28/69	Helsley et al.			
AG	4,071,524	01/31/78	Banitt			
AH	4,111,683	09/05/78	Singer			
AI	4,437,878	03/20/78	Acker et al.			
AJ	4,643,849	02/17/87	Hirai et al.			
AK	5,773,459	06/30/98	Tang et al.			
AL	5,508,288	04/16/96	Forbes et al.			
AM	4,062,861	12/13/77	Yukinaga et al.			
AN	4,111,680	09/05/78	Yukinaga et al.			
AO	4,116,671	09/26/78	Yukinaga et al.			
AP	4,212,981	07/15/80	Yukinaga et al.			
AQ	5,162,360	11/10/92	Creswell et al.			
AR	4,514,571	04/30/85	Nakai et al.			
AS	3,754,887	08/28/73	Brantley			
AT	3,646,059	02/29/72	Brantley			
AU	5,696,138	12/9/97	Olesen et al.			
AV	5,780,483	7/14/98	Widdowson et al.			
AW	4,405,644	9/20/83	Kabbe et al.			
AX	4,473,579	9/25/84	Devries et al.			
AY	4,526,997	7/2/85	O'Doherty et al.			
AZ	4,468,380	8/28/84	O'Doherty et al.			
BA	4,623,662	11/18/86	De Vries			
BB	4,985,449	1/15/91	Haga et al.			
BC	5,312,820	5/17/94	Ashton et al.			
BD	4,410,697	10/18/83	Török et al.			
BE	4,001,256	1/4/97	Callahan et al.			
BF	5,399,566	3/21/95	Katano et al.			
BG	5,500,424	3/19/96	Nagamine et al.			

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 09/993547
 11/27/01

	BH	5,597,719	1/28/97	Freed et al.			
	BI	4,183,854	1/80	Crossley			
	BJ	3,828,001	8/74	Broad et al.			
	BK	4,740,520	4/88	Hallenbach et al.			
	BL	5,319,099	6/7/94	Kamata et al.			

FOREIGN PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Country	Class	Subclass	Translation	
						Yes	No
	BM	EP 335156	03/11/89	European			X
	BN	EP 459887	05/28/91	European			X
	BO	EP 371876	11/28/89	European			X
	BP	93/24458	12/9/93	WO		X	
	BQ	2,146,707	10/12/95	Canada		X	
	BR	96/40673	12/19/96	WO		X	
	BS	94/14801	07/07/94	WO		X	
	BT	94/25012	11/10/94	WO		X	
	BU	1,590,870	06/10/81	England		X	
	BV	93/18028	09/16/93	WO		X	
	BW	94/18170	08/18/94	WO		X	
	BX	DE 3305866 A1	02/19/83	Germany			X
	BY	95/02591	01/26/95	WO		X	
	BZ	95/13067	05/18/95	WO		X	
	CA	95/07922	03/23/95	WO		X	
	CB	95/31451	11/23/95	WO		X	
	CC	A1 96/40675	12/19/96	WO		X	
	CD	JP 53 086033	7/29/78	Japan			
	CE	JP 51 063170	1/6/76	Japan			
	CF	97/49400	12/31/97	WO			
	CG	97/49399	12/31/97	WO			
	CH	96/40673	12/19/96	WO			
	CI	99/00357	1/7/99	WO			
	CJ	97/45400	12/4/97	WO			
	CK	96/02112	3/8/90	WO			
	CL	99/00370	1/7/99	WO			
	CM	97/29743	8/21/97	WO			
	CN	98/22432	5/28/98	WO			
	CO	96/25157 A1	8/22/96	WO			
	CP	97/40028 A1	10/30/97	WO			

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

CQ	Dumas, J., "CAS Substructure," May 6, 1997, pages 1-29.
CR	Scott, Bill, "Substructure (Patent Families)," August 11, 1997, pages 1-19.
CS	Scott, Bill, "Substructure #2," November 25, 1997, pages 1-3.
CT	"Beilstein number" Collection, 28 pages.
CU	"Beilstein Collection," 4 pages.
CV	Scott, Bill, "Substructure Search," December 2, 1997, pages 1-51.
CX	Substructure Search, pages 1-30.
CY	Derwent World Patents Index Search, pages 20-26.
CZ	Abstract of EP 116,932
DA	Abstract of EP 676,395
DB	Abstract of EP 202,538
DC	Abstract of EP 16,371
DD	Avruch et al., "Raf meets Ras: completing the framework of a signal transduction pathway", TIBS 19; July 1994; pp. 279-2823.
DE	White, A. D., et al., "Heterocyclic Ureas: Inhibitors of Acyl-CoA:Cholesterol <i>O</i> -Acyltransferase as Hypocholesterolemic Agents," June 6, 1996, pages 4382-95.
DF	Audia, James E., et al., "Potent, Selective Tetrahydro- β -carboline Antagonists of the Serotonin 2B (5HT _{2B}) Contractile Receptor in the Rat Stomach Fundus," January 22, 1996, pages 2773-80.
DG	Forbes, Ian T., "N-(1-Methyl-5-indolyl)-N'-(3-methyl-5-isothiazolyl)urea: A Novel, High-Affinity 5-HT _{2B} Receptor Antagonist," March 17, 1995, pages 855-57.
DH	Boulton, A. J., et al., "Heterocyclic Rearrangements. Part X. ¹ A Generalised Monocyclic Rearrangement," 1967, 2005-07.
DI	N. S. Magnuson, et al., "The Raf-1 serine/threonine protein kinase," Cancer Biology, vol. 5, 1994, pages 247-253.
DJ	G. Daum, et al., "The ins and outs of Raf Kinases.," TIBS 19, November 1994, pages 474-80.
DK	W. Kolch, et al., "Raf-1 protein kinase is required for growth of induced NIH/3T3 cells," Letters to Nature, vol. 349, January 31, 1991, page 226-28.
DL	M. Fridman, et al., "The Minimal Fragments of c-Raf-1 and NF1 That Can Suppress v-Ha-Ras-Induced Malignant Phenotype," The Journal of Biological Chemistry, vol. 269, no. 48, December 2, 1994, pages 30105-108.
DM	G. L. Bolton, et al., Chapter 17. Ras Oncogene Directed Approaches in Cancer Chemotherapy, Annual Reports In Medicinal Chemistry, vol. 29, 1994, pages 165-74.
DN	J. L. Bos, "ras Oncogenes in Human Cancer: A Review," Cancer Research, vol. 49, September 1, 1989, pages 4682-89.
DO	Michaelis, Justus, Liebigs Ann. Chem. (JLACBF) 397, 1913, 143.
DP	B. P. Monia, et al., "Antitumor activity of a phosphorothioate antisense oligodeoxynucleotide targeted against C-raf kinase," Nature Medicine, vol. 2, No. 6, June 1996, pages 668-75.
DQ	Lee, et al., Bicyclic Imidazoles as a Novel Class of Cytokine Biosynthesis Inhibitors," N.Y. Academy of Science, 1993, pages 149-70.
DR	F. Lepage, et al., "New N-aryl isoxazolecarboxamides and N-isoxazolybenzamides as anticonvulsant agents," Eur. J. Med. Chem, vol. 27, 1992, pages 581-93.
DS	Ridley, et al., "Actions of IL-1 are Selectively Controlled by p38 Mitogen-Activated Protein Kinase," The American Association of Immunologists, 1997, page 3165-73.
DT	Chemical Abstract, Vol. 116, No. 21, 25 May 1992, pages 741-742.

U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date
	DU	5,059,614	10/22/91	Lepage et al.		
	DV	3,743,498	7/3/73	Brantley		
	DW	3,547,940	12/15/70	Brantley		
	DX	5,432,468	7/11/95	Moriyama et al.		
	DY	1,742,156	2/31	Fitzky		
	DZ	2,046,375	7/36	Goldstein et al.		
	EA	2,093,265	9/36	Coffby et al.		
	EB	2,288,422	6/42	Rohm		
	EC	2,683,082	7/54	Hill et al.		
	ED	2,745,874	5/56	Schetty et al.		
	EF	2,781,330	2/57	Downey		
	EG	2,867,659	1/59	Model et al.		
	EH	2,877,268	3/59	Applegate et al.		
	EI	2,960,488	11/60	Tamblyn et al.		
	EJ	3,689,550	9/72	Schellenbaum et al.		
	EK	3,860,645	1/95	Nikawitz		
	EL	5,423,905	6/95	Fringeli		
	EM	2,973,386	2/61	Weldon		
	EN	3,230,141	1/66	Frick et al.		
	EO	4,863,924	9/89	Haga et al.		
	EP	4,511,571	4/85	Böger et al.		
	EQ	4,173,638	11/79	Nishiyama et al.		
	ER	4,173,637	11/79	Nishiyama et al.		
	ES	4,820,871	4/89	Kissener et al.		
	ET	4,983,605	1/91	Kondo et al.		
	EU	5,098,907	3/92	Kondo et al.		
	EV	5,036,072	7/91	Nakajama et al.		
	EW	5,470,882	11/95	Dixon et al.		
	EX	5,429,918	7/95	Seto et al.		
	EY	3,151,023	9/64	Martin		
	EZ	3,200,035	8/65	Martin et al.		
	FA	5,807,891	9/15/98	Bold et al.		
	FB	4,009,847	3/1/77	Aldrich et al.		

FOREIGN PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Country	Class	Subclass	Translation	
						Yes	No
	FC	95/33458	12/14/95	WO			
	FD	0 771 333	3/57	Great Britain			
	FE	0 921 682	3/63	Great Britain			
	FF	0 253 997	2/88	East Germany			
	FG	0 405 233	1/91	Europe			

	FH	1 457 172	9/66	France			
	FI	0 487 014	12/29	Germany			
	FJ	0 511 468	10/30	Germany			
	FK	0 523 437	5/31	Germany			
	FL	44 2569	2/69	Japan			
	FM	55 98152	7/80	Japan			
	FN	94 22807	10/94	WIPO			
	FO	3 532 47	3/91	Japan			
	FP	0 828 231	10/56	Great Britain			
	FQ	50-149668	11/75	Japan			
	FR	55-162772	12/80	Japan			
	FS	60-76072	6/75	Japan			
	FT	51-80862	7/76	Japan			
	FU	50-77375	6/75	Japan			
	FV	55-124763	9/80	Japan			
	FW	0 502 504 A1	9/92	Europe			
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)							
	FX	Tarzia, G. et al. "Whythesis and anti-inflammatory properties of some pyrrolo(1H,3H)[3,4]pyrimidin-2-ones and pyrrolo(1H,3H)[3,4-d]pyrimidin-2-ones and pyrrolo(1H,3H)-pyrimidin-2-ones. Chemical Abstracts. 27 August 1979, No. 74558p; page 594.					
	FY	Abstract WO 9922103 , Hedge 28 May 1998					
	FZ						
Examiner					Date Considered		

Form PTO 1449 (Modified)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY DOCKET NO. BAYER 18A	SERIAL NO. TO BE ASSIGNED
LIST OF REFERENCES CITED BY APPLICANT		APPLICANT Bernd RIEDL et al.	
		FILING DATE November 27, 2001	GROUP TO BE ASSIGNED

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
AA						
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FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION	
				YES	NO
AN	9,852,559	11/1998	WO		
AO	9,852,558	11/1998	WO		
AP	9,932,436	7/1999	WO		
AQ	9,932,106	7/1999	WO		
AR	9,932,455	7/1999	WO		
AS	9,932,463	7/1999	WO		
AT	9,932,111	7/1999	WO		
AU	9,932,110	4/1999	WO		
AV	9,933,458	11/1998	WO		

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)

AW	Appln No. 08/863,021, May 23, 1997, RAF Kinase Inhibitors
AX	Appln No. 08/863,022, May 23, 1997, RAF Kinase Inhibitors
AY	Unassigned, December 22, 1998, Inhibition of RAF Kinase Using Symmetrical Substituted Diphenyl Ureas
AZ	Appln No. 09/479,125, December 22, 1998, Inhibition of RAF Kinase Using Substituted Heterocyclic Ureas (Abandoned in favor of Bayer 8C1 Serial No. 09/640,780 filed August 18, 2000)

Examiner	Date Considered
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*Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.


Form PTO 1449 (Modified)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY DOCKET NO. BAYER 18A		SERIAL NO. TO BE ASSIGNED	
LIST OF REFERENCES CITED BY APPLICANT				APPLICANT Bernd RIEDL et al.			
				FILING DATE November 27, 2001		GROUP TO BE ASSIGNED	
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)							
	AAA	Appln No. 09/472,232, December 27, 1998, Inhibition of RAF Kinase Using Aryl and Heteroaryl Substituted Heterocyclic Ureas					
	AAB	Appln No. 09/458,015, December 10, 1999, Inhibition of P38 Kinase Activity Using Symmetrical and Unsymmetrical Diphenyl Ureas					
	AAC	Appln No. 09/458,014, December 10, 1999, Inhibition of P38 Kinase Activity Using Substituted Heterocyclic Ureas					
	AAD	Unassigned, December 22, 1998, Inhibition of RAF Kinase Using Aryl and Heteroaryl Substituted Heterocyclic Ureas					
	AAE	Appln No. 09/425,229, October 22, 1999, ω -Carboxy Arly Substituted Diphenyl Ureas P38 Kinase Inhibitors					
	AAF	Kubo, Hiroshi et al. "Herbicide activity of 1,3,4-thiadiazole derivatives" J. Agr. Food Chem. (1970) , 18(1), 60-5					
	AAG	Caplus 95:61995, Abstract JP 55162772, Substituted acetic derivatives., Shionogi & Co., May 23, 1980					
	AAH	Caplus 86:72448, Abstract JP 57053785, Pyridine derivatives, Maeda Ryoza et al., November 15, 1982					
	AAI	Caplus 84:180049, Abstract JP 56029871, Hamada Yoshinori et al., July 10, 1981					
	AAJ	Caplus 84:43857, Abstract JP 58021626, Maeda Ryoza et al., May 2, 1983					
	AAK						
	AAL						
	AAM						
	AAN						
	AAO						
	AAP						
Examiner						Date Considered	

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Form PTO 1449 (Modified)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY DOCKET NO. BAYER 18A	SERIAL NO. TO BE ASSIGNED
LIST OF REFERENCES CITED BY APPLICANT		APPLICANT Bernd RIEDL	
		FILING DATE November 27, 2001	GROUP TO BE ASSIGNED

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
AA	5,429,918	4 July, 1995	SETO ET AL.			
AB	5,814,646	9/29/1998	HEINZ			
AC	4,042,372	8/16/1977	HARPER			
AD	3,990,879	11/9/1976	SOPER			
AE	5,185,358	2/09/1993	CRESWELL			
AF						
AG						
AH						
AI						
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AK						
AL						
AM						
AN						

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FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION YES NO
AO 16371	3/5/80	EP	
AP 676395	7/17/1996	EP	
AQ 2436179	2/6/1975	DE	
AR 242666	10/28/1987	EP	
AS 99/32111	7/01/1999	WO	
AT 99/32455	7/01/1999	WO	
AU 99/24398	5/20/1999	WO	
AV 98/52559	11/26/1998	WO	

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)

AW	Kubo, Hiroshi et al: "herbicidal activity..." J. Agr. Food Chem, (1970), 18(1), 60-5
AX	Russo, F. et al. "Synthesis of 2,6-substituted derivatives of 5H-1,3,4-thiadiazolo'3,2-a'-s triazine-5,7-dione" FARMACO, ED.SCI. (1978), 33(12), 972-83
AY	Foussard-Blanpin, Odette: "Comparative pharmacodynamic study of variously substituted carboxamides of the central nervous system" Ann. Pharm. Fr. (1982), 40 (4), 339-50
AZ	Grant, A.M et al.: "Hypotensive thiadiazoles" J.Med. Chem. (1972), 15(10), 1082-4

Examiner	Date Considered
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LIST OF REFERENCES CITED BY APPLICANT		APPLICANT Reidl et al.	
		FILING DATE November 27, 2001	GROUP TO BE ASSIGNED

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
AA	5,698,581	12/16/97	KLEEMANN ET AL.			
AB	4,760,063	07/26/88	HALLENBACH ET AL.			
AC	4,240,820	12/23/80	DICKORE ET AL.			
AD	5,908,865	6/1/1999	DOI ET AL.			
AE	6,080,763	6/27/2000	REGAN ET AL.			
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FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION	
				YES	NO
AO	DE 35 29 247 A1	8/20/85	Germany		
AP	DE 35 40 377 A1	11/14/85	Germany		
AQ	00/17175	09/16/99	WO		
AR	99/23091	5/14/1999	WO		
AS	98/22103	5/28/1998	WO		
AT	00/43384	7/27/2000	WO		
AU	00/55152	9/21/2000	WO		
AV	00/55139	9/21/2000	WO		

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)

AW	Abstract of EP 676,395 (U.S. equivalent 5,698,581)
AX	Abstract of EP 4931 (U.S. equivalent 4,240,820)
AY	Abstract of DE 3305866 (EP equivalent 116,932)
AZ	Abstract of EP 202,538

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